

FAQ

Q I'd like to create a customised installation DVD for Windows Vista. What utilities are available to help?

A The free nLite application for making customised installation, or 'slipstreaming', discs works for Windows 2000 and XP only, but its author has developed a beta version of a Vista slipstreaming application, called vLite.

It isn't yet as comprehensive as nLite and you can't use it to slipstream Vista Service Packs or updates, but as there are no Service Packs available yet and few updates compared with XP, this isn't particularly a problem. It still has some powerful customisation options.

You can add or remove Windows components to reduce the amount of room Vista takes up, tweak the default setup to disable features such as User Account Control, and include extra device drivers in the installation. As with nLite, you can enter Windows Setup information in advance so that Vista installs from scratch without you having to be there. It is a small download of less than a megabyte, and you can get it from www.vlite.net.

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Slipstream your XP installation

Are you fed up with wasting hours of your life every time you have to reinstall Windows XP? Chris Finnamore shows you how to build your own automatic installation disc

Installing Windows XP from scratch can be a time-consuming process. Even when you've installed the operating system, it takes a while to add the latest Service Pack and download and install all the updates you need. Windows XP comes with many device drivers as standard, but there is often hardware that it doesn't recognise, such as graphics and sound cards, and you have to install drivers for these.

You can make the XP installation process far quicker and easier by creating a custom installation CD, using a process called slipstreaming. A slipstreamed installation automatically installs the latest Service Packs for your operating system, as well as all the latest fixes and updates. You can add your device drivers to the installation, so your PC is ready to go right away. You can even answer in advance all the questions Windows Setup asks you, so the process can run completely unattended. In this month's *PC Builder* we'll take you through creating your own customised Windows XP installation disc using the free nLite application on the cover DVD (also available from www.nliteos.com).

PREPARATION

1 Before you start, you need to find out which updates and device drivers you need. Open the Control Panel and double-click on Add or Remove Programs. Check the Show Updates box at the top. Now scroll down the list to the Windows XP – Software Updates section, and note down the code numbers of all the updates installed on your PC. The code numbers usually start with 'KB' and are followed by five numbers. Create a folder on your Windows Desktop called Updates. Now go to www.microsoft.com, search for each update by its codename and download it to your Updates folder.

Now check to see if your Windows installation disc already includes Service Pack 2. If it's not obvious from the packaging, insert the CD, close the window that pops up, right-click on the disc in My Computer and select Open. A Windows CD with Service Pack 2 will have a file with the extension .SP2 in the root directory. If this file is present, skip to step 2.

If Service Pack 2 is missing and you have a Service Pack 2 installation CD, insert it and close the window that pops up. Copy all the files on the CD to a folder called XP_SP2 on your Desktop.

If you don't have a CD, download the standalone Service Pack 2 installer from <http://tinyurl.com/5bobl>. Use WinRAR from www.rarlab.com to open the self-extracting archive, and copy the contents of the i386 folder to a folder called XP_SP2 on your Desktop.

Create a folder called XP_Source on your Desktop. Put the XP disc in your drive and copy the entire contents to the XP_Source folder on your Desktop.

DRIVER ON

2 You'll probably need extra drivers for your graphics card, sound chipset, motherboard chipset and wireless networking adaptor, and there may be others, depending on your PC. If you're installing XP to a

RAID array, or you normally have to load your SATA controller drivers from a floppy disk during installation, you should also add the RAID and SATA drivers to your slipstreamed CD.

The nLite program accepts only drivers that are uncompressed in a folder. Many graphics card drivers and some chipset drivers come in executable program packages, which won't work. However, when you installed these drivers, they should have been extracted to a folder on your hard disk. For example, Nvidia's nForce and graphics card drivers will be in C:\NVIDIA.

Once you've found the drivers you need, copy them into the Drivers folder on your desktop. Create a folder for each set of drivers, with appropriate names such as Graphics, Sound and Chipset. Copy the corresponding drivers into each folder from your installation CDs or the uncompressed folders on your hard disk. Some driver folders may contain multiple versions of drivers for different hardware or operating systems, but nLite lets you select the right drivers for your PC.

INSTALLATION

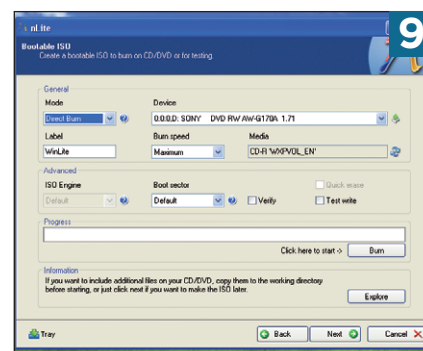
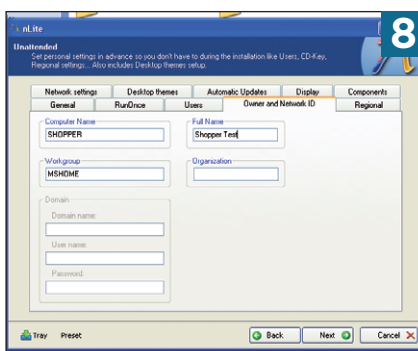
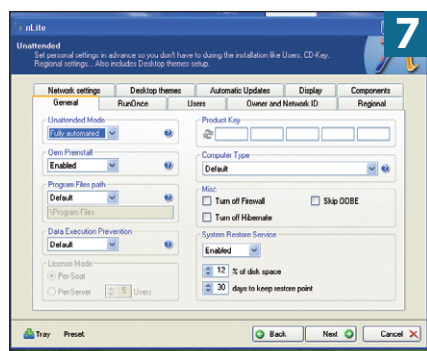
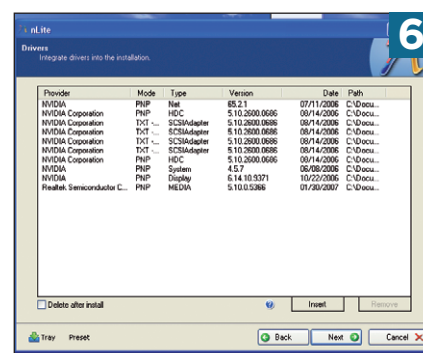
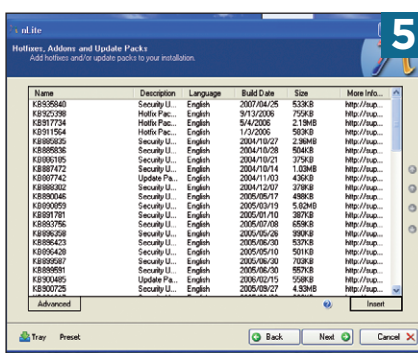
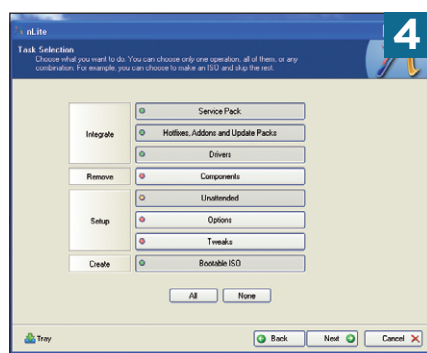
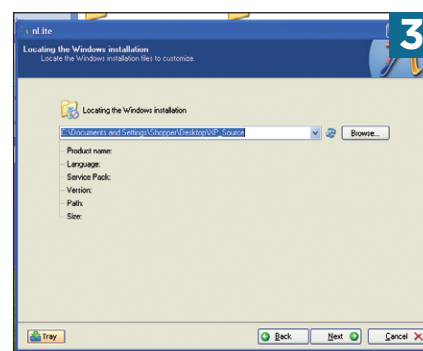
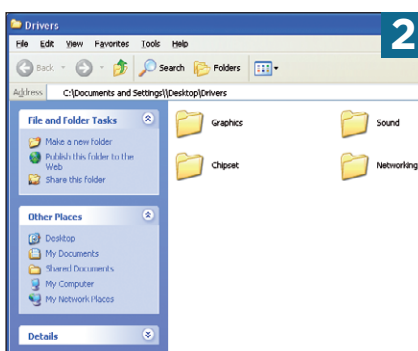
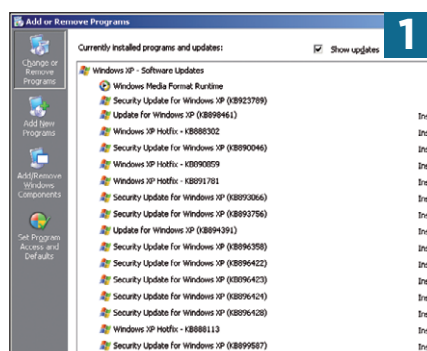
3 Install nLite and run the application. Click Next on the first screen to choose English as your language. The following screen lets you select the location of your Windows installation. Click the Browse button and navigate to the XP_Source folder on your desktop. Click OK to select the folder. nLite will scan the folder and display information about the Windows installation. Click Next. The next screen lets you load previous nLite settings, but you won't have any yet, so click Next again.

4 To add the drivers, service packs and updates you need, click the following buttons: Hotfixes, Addons and Update Packs, Drivers, Unattended, and Bootable ISO. If your Windows XP CD doesn't already include Service Pack 2, also click Service Packs. Each customisation option has its own setup screen. Click Next to start. If you don't need to integrate Service Pack 2, skip to Step 5.

Click the Select button and browse to the XP_SP2 folder on your desktop. Open the folder, click on XPSP2.EXE and click Open. There will be a pause while Service Pack 2 is slipstreamed into your installation. Once this has finished, click OK, then click Next.

5 To integrate the Hotfixes and Updates you have downloaded, click the Insert button at the bottom of the next screen. Browse to your Updates folder and open it. Select all the Updates in the folder and click Open. The updates will now be listed in the nLite window. Click Next.

6 In the Drivers screen, click Insert and select the Multiple driver folder option. Browse to the Drivers folder on your desktop, select it and click OK. nLite will scan the folder and all its subfolders for device drivers. A window will appear showing all the drivers it has found. You may have to resize the window to fit the



names in. You need to be careful that you select the correct drivers for your PC, as many driver installation folders have multiple drivers for different hardware and operating systems. Consult your hardware's manual to make sure you're installing the right driver for your hardware. Click on all the appropriate drivers to select them, then click OK.

If your Drivers folder contains SATA or SATA RAID drivers, which you would normally install from a floppy disk, nLite will prompt you to choose which of these drivers you want to install. Floppy disk-installed drivers are known as Textmode drivers, as they're installed during the text-only part at the beginning of an XP installation. If you're installing to a RAID array, you'll need the Textmode RAID driver. If your SATA controller needs a special driver, select the driver for your SATA controller. Select the relevant drivers and click OK. The nLite screen will show a list of the drivers you're going to integrate into the installation. Click Next.

7 The Unattended screen lets you specify default installation options so that Setup won't stop and ask you questions. The Unattended screen is complicated, so read the help files provided for each option by clicking on the question mark icon next to each one.

If you'd like an unattended installation, you'll need to provide nLite with answers to all the questions it will be asked. The problem is that if you miss an answer or have drivers that are not

digitally signed by Microsoft, Setup will run into problems or not install the drivers. A good compromise is to use nLite's Hide pages option. This will automate all the Windows Setup steps for which you provide answers, but if any information is missing or your drivers aren't digitally signed, Setup will stop and ask you.

Most Windows XP installations should work unattended if you fill in the following data. First, in the General tab, select Hide pages from the Unattended mode drop-down menu. Now enter your Windows Product Key in the boxes provided. Leave the rest of the options. Click the Users tab, and enter any user accounts and passwords you want to set up on the PC. If you don't want an Administrator password, make sure you tick the Blank password box, or Windows Setup will stop the installation and ask for a password. Select whether or not the system should log on automatically with a particular user by selecting that user from the User name box.

8 The next step is to click on Owner and Network ID, and fill in all the information you need. The required fields for an unattended installation are Computer Name, Workgroup and Full Name. The default XP Home Workgroup is MSHOME, and the default XP Professional Workgroup is WORKGROUP.

Next, click Regional. If you're in the UK, select English (United Kingdom) from the Language box. Then click the Custom button below it. Select English (United Kingdom) in the

Localization box, United Kingdom in the Location box and Greenwich Mean Time (London, Edinburgh etc.) in the Timezone box.

If you wish, you can set the default screen colour depth and resolution in the Display field, but make absolutely sure that your graphics card and monitor support them, or the display won't work and you won't be able to change them back. Also, the Display options work only if you have slipstreamed your graphics card drivers into the installation CD.

9 Once you have set all the Unattended options, click Next. You'll be asked if you want to start the process, so click Yes. nLite will take around 10 minutes to create the custom installation. When it's finished, click Next. A built-in CD burning program lets you burn straight to a CD or create an ISO file so that you can easily burn new copies of your CD later.

Once you've burned your slipstreamed installation to CD, boot from it and install Windows as usual. Note any dialog boxes that pop up during the installation. If any information is missing from your slipstreamed CD, you can use nLite to fill it in and create a new CD. **CS**

Next month

BIOS TWEAKS

Optimise your PC's performance with some low-level settings changes